```
gatatcgttacgcttcatgtgccgctcaatacggatacgcactatattat
cagccacgaacaaatacagagaatgaagcaaggagcatttcttatcaata
ctgggcgcggtccacttgtagatacctatgagttggttaaagcattagaa
aacgggaaactgggcggtgccgcattggatgtattggaaggagaggaaga
gttttctactctgattgcacccaaaaaccaattgataatcaatttttac
ttaaacttcaaagaatgcctaacgtgataatcacaccgcatacggcctat
tataccgagcaagcgttgcgtgataccgttgaaaaaaccattaaaaactg
tttggattttgaaaggagacaggagcatgaatagaataaaagttgcaata
ctgtttgggggttgctcagaggagcatgacgtatcggtaaaatctgcaat
agagatagccgctaacattaataaagaaaaatacgagccgttatacattg
gaattacgaaatctggtgtatggaaaatgtgcgaaaaaccttgcgcggaa
tgggaaaacgacaattgctattcagctgtactctcgccggataaaaaaat
gcacggattacttgttaaaaagaaccatgaatatgaaatcaaccatgttg
atgtagcattttcagctttgcatggcaagtcaggtgaagatggatccata
caaggtctgtttgaattgtccggtatcccttttgtaggctgcgatattca
aagctcagcaatttgtatggacaaatcgttgacatacatcgttgcgaaaa
atgctgggatagctactcccgccttttgggttattaataaagatgatagg
ccggtggcagctacgtttacctatcctgtttttgttaagccggcgcgttc
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gctgtttcgggctgtgaggtcggttgtgcggtattgggaaacagtgccgc
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aggggtgataagcatggaaataggatttactttttttagatgaaatagtac
acggtgttcgttgggacgctaaatatgccacttgggataatttcaccgga
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ggctgaatcgcttttgaaggcaaaagaactggctgctacccaagggtacg
gattgcttctatgggacggttaccgtcctaagcgtgctgtaaactgtttt
atgcaatgggctgcacagccggaaaataacctgacaaaggaaagttatta
tcccaatattgaccgaactgagatgatttcaaaaggatacgtggcttcaa
aatcaagccatagccgcg
```

Fig 1

```
                    10                  20                  30                  40
 1    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -  U94526.seq
 1    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -  U94527.seq
 1    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -  U94528.seq
 1    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -  U94529.seq
 1    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -  U94530.seq
 630  C - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -  L15304.seq
 783  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -  U72704.seq
1090  (shaded sequence)                                                                  U00456.seq
```

- Majority

```
                    50                  60                  70                  80
 1    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -  U94526.seq
 1    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -  U94527.seq
 1    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -  U94528.seq
 1    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -  U94529.seq
 1    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -  U94530.seq
 629  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -  L15304.seq
 783  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -  U72704.seq
1050  (shaded sequence)                                                                  U00456.seq
```

- Majority

```
                    90                 100                 110                 120
 1    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -  U94526.seq
 1    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -  U94527.seq
 1    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -  U94528.seq
 1    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -  U94529.seq
 1    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -  U94530.seq
 629  - - - - - - - - - - - - - - - (shaded sequence)                                    L15304.seq
 783  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -  U72704.seq
1010  (shaded sequence)                                                                  U00456.seq
```

- - - - - - - - - A A C G A T G C C G C C A T C C T C C T G C A A A A A A A A G A T C A Majority

```
                   130                 140                 150                 160
 1    - - - - - - - A A C G A T G C C G C C A T C C T C C T G C A A A A A A A A G A T C A  U94526.seq
 1    - - - - - - - A A C G A T G C C G C C A T C C T C C T G C A A A A A A A A G A T C A  U94527.seq
 1    - - - - - - - A A C G A T G C C G C C A T C C T C C T G C A A A A A A A A G A T C A  U94528.seq
 1    - - - - - - - A A C G A T G C C G C C A T C C T C C T G C A A A A A A A A G A T C A  U94529.seq
 1    - - - - - - - A A C G A T G C C G C C A T C C T C C T G C A A A A A A A A G A T C A  U94530.seq
 603  (shaded) A A C G A T G C C G C C A T C C T C C T G C A A A A A A A A G A T C A       L15304.seq
 783  - - - - - - - (shaded)                         C A A A A A A A A G A T C A          U72704.seq
 970  (shaded) A A C G A T G C C G C C A T C C T C C T G C A A A A A A A A G A T C A       U00456.seq
```

Fig 2 (sheet 1 of 10)

```
          .A C A C G G G C A A G C C C T C T G C A T C C A A G C A C C C G A T A T A C T T   Majority

                      170                 180                 190                 200

 35   A C A C G G G C A A G C C C T C T G C A T C C A A G C A C C ? G A T A T A C T T   U94526.seq
 35   A C A C G A G C A A G C C C T C T G C A T C C A A G C A C C C G A T A T A C T T   U94527.seq
 35   A C A C G G G C A A G C C C T C T G C A T C C A A G C A C C C G A T A T A C T T   U94528.seq
 35   A C A C G G G C A A G C C C T C T G C A T C C A A G C A C C C G A T A T A C T T   U94529.seq
 35   A C A C G G G C A A G C C C T C T G C A T C C A A G C A C C C G A T A T A C T T   U94530.seq
563   A C A C G G G C A A G C C C T C T G C A T C C A A G C A C C C G A T A T A C T T   L15304.seq
770   A C A C G G G C A A G C C C T C T G C A T C C A A G C G C C C G A T A T A C T T   U72704.seq
930   A C A C G A G C A A G C C C T C T G C A T C C A A G C A C|C C G A T A T A C T T   U00456.seq


      T C T T T G C C G T T T C C T G C A C C C G A T T T C G T T C C T C G A C C G G   Majority

                      210                 220                 230                 240

 75   T C T T T G C C G T T T C C T G C A C C C G A T T T C G T T C C T C G A C C G G   U94526.seq
 75   T C T T T G C C G T T T C ? T G C A C C C G A T T T C G T T C C T C G A C C G G   U94527.seq
 75   T C T T T G C C G T T T C C T G C A C C C G A T T T C G T T C C T C G A C C G G   U94528.seq
 75   T C T T T G C C G T T T C C T G C A C C C G A T T T C G T T C C T C G A C C G G   U94529.seq
 75   T C T T T G C C G T T T C C T G C A C C C G A T T T C G T T C C T C G A C C G G   U94530.seq
523   T C T T T G C C G T T T C C T G C A C C C G A T T T C G ? T C C T C G A C C G G   L15304.seq
730   T C T T T G C C G T T T C C T G C A C C C G A T T T C G T T C C G C G A C ? G G   U72704.seq
890   T C T T T G C C G T T T C ? T G.C A C C C G A T T T C G T T C C T C G A C C G G   U00456.seq


      A A T G T C T G C G G G A A C T G T A A T C A T C G C A T T T T C T G A G C C T   Majority

                      250                 260                 270                 280

115   A A T G T C T G C G G G A A C T G T A A T C A T C G C A T T T T C T G A G C C T   U94526.seq
115   A A T G T C T G C ? G G A A C ? T A A T C A T C G C A T T ? T C T G A G C C T   U94527.seq
115   A A T G T C T G C G G G A A C T G T A A T C A T C G C A T T T T C T G A G C C T   U94528.seq
115   A A T G T C T G C G G G A A C T G T A A T C A T C G C A T T T T C T G A G C C T   U94529.seq
115   A A T G T C T G C G G G A A C T G T A A T C A T C G C A T T T T C T G A G C C T   U94530.seq
483   A A T G T C T G C G G G A A C T G T A A T C A T C G C A T T T T C T G A G C C T   L15304.seq
690   ? A T G T C T G C ? G G A A C ? G T A A T C A T C G C A T T ? T C T G A ? C C T   U72704.seq
850   A A T G T C.T G C ? G G A A C ? T A A T C A T C G C.A T T ? T C T G|A G C C T   U00456.seq


      T T T T C C G G C T C G T T T T C C T G A T G G A T G C G G A A G A T A C C G T   Majority

                      290                 300                 310                 320

155   T T T T C C G G C T C G T T T T ? C T G A T G G A T G C G G A A G A T A C C G T   U94526.seq
155   T T T T C C G G C T C G T T T T C C T G A T G G A T G C G G A A G A T A C C G T   U94527.seq
155   T T T T C C G G C T C G T T.T T C C T G A T G G A T G C G G A A G A T A C C G T   U94528.seq
155   T T T T C C G G C T C G T T T T C C T G A T G G A T G C G G A A G A T A C C G T   U94529.seq
155   T T T T C C G G C T C G T T T T C C T G A T G G A T G C G G A A G A T A C C G T   U94530.seq
443   T T T T C C G G C T C G T T T T C C T G A T G G A T G C G G A A G A T A C C G T   L15304.seq
650   T T T T C C G G C T C G T T T T C C T G A T G G A T G C G G A A G A T A C C ? T   U72704.seq
810   T T T T C C G G C T C G T T ? T T C C T G A T G G A T G.C G G A A G A T A|C C G T   U00456.seq
```

FIG. 2 (sheet 2 of 10)
cont'd

```
          .G G C T C A G C C G G A T T T G A T C C A C T T C G C C G A C A A T C A A A T C   Majority

                    330                340                350                360

195   G G C T C A G C C G G A T T T G A T C C A C T T C G C C G A C A A T C A A A T C   U94526.seq
195   G G C T C A █C C G G A T T T G A T C C A C T T C G C C G A C A A T C A A A T C   U94527.seq
195   G G C T C A G C C G G A T T T G A T C C A C T T C G C C G A C A A T C A A A T C   U94528.seq
195   G G C T C A G C C G G A T T T G A T C C A C T T C G C C G A C A A T C A A A T C   U94529.seq
195   G G C T C A G C.C G G A T T T G A T C C A C T T C G C C G A C A A T C A A A T C   U94530.seq
403   G G C T C A G C C G G A T T T G A T C C A C T T C G C C G A C A A T C A A A T C   L15304.seq
610   G G C T C A G C C G G A T T T G A T C C A C T T C G C C G A C A A T C A A A T C   U72704.seq
770   G G,C T C A █C C G,G A T T T G A T C C A C T T C G C C G A C A A T C A A A T C   U00456.seq

          A T C C T C G T T C C C C A T G A C C G C A C A C C C G A C C T C A C A G C C C   Majority

                    370                380                390                400

235   A T C C T C G T T C C C C A T G A C C G C A C A C C C G A C C T C A C A G C C C   U94526.seq
235   A T C C T C G T T █C C C A T G A C C G C █C A █C C G A C C T C A C A G C C C   U94527.seq
235   A T C C T C G T T C C C C A T G A C C G C A C A C C C G A C C T C A C A G C C C   U94528.seq
235   A T C C T C G T T C C C C A T G A C C G C A C A C C C G A C C T C A C A G C C C   U94529.seq
235   A T C C T C G T T C C C C A T G.A C C G C A C A C C C G A C C T C A C A G C C C   U94530.seq
363   A T C C T C G T T C C C C A T G A C C G C A C A C C C G A C C T C A C A G C C C   L15304.seq
570   A T C C T C G T T C C C C A T █A C C G C A C A █C C G A C C T C A C A G C C C   U72704.seq
730   A T C C T C G T T █C C C A T G A C C G C █C A █C C G A C C T C A C A G C C C   U00456.seq

          G A A A T C G C T T G C T C A A T T A A G A T T T T T C C A T C A T A T T G T C   Majority

                    410                420                430                440

275   G A A A T C G C T T G C T C A A T T A A G A T T T T T C C A T C A T A T T G T C   U94526.seq
275   G A A A T C G C T T G C T C A A T T A A G A T T T T T C C A T C A T A T T G T C   U94527.seq
275   G A A A T C G C T T G C T C A A T T A A G A T T T T T C C A T C A T A T T G T C   U94528.seq
275   G A A A T C G C T T G C T C A A T T A A G A T T T T T C C A T C A T A T T G T C   U94529.seq
275   G A A A T C G C T T G C T C A A T T A A G A T T T T T C C A T C A T A T T G T C   U94530.seq
323   G A A A T C G C T T G C T C A A T T A A G A T T T T T C C A T C A T A T T G T C   L15304.seq
530   G A A A T C G C T T G C T C A A T T A A G A T T T T T C C A T C A T A T T G T C   U72704.seq
690   G A A A.T C G C T T G C T C A A T T A A G A T T T T T C C A T C A T A T T G T C   U00456.seq

          C T G C C G C T T C T A T C G C A G C G T T A A G T T C T T C C G T A C C G T T   Majority

                    .450               460                470                480

315   C T G C C G C T T C T A T C G C A G C G T T A A G T T C T T C C G T A C C G T T   U94526.seq
315   C T G C █G C T T C T A T C G C A G C G T T █A G T T C T T C C G T A C █G T T   U94527.seq
315   C T G C C G C T T C T A T C G C A G C G T T A A G T T C T T C C G T A C C G T T   U94528.seq
315   C T G C C G C T T C T A T.C G C A G C G T T A A G T T C T T C C G T A C C G T T   U94529.seq
315   C T G C C G C T T C T A T C G C A G C G T T A A G T T C T T C C G T A C C G T T   U94530.seq
283   C T G C C G C T T C T A T C G C A G C G T T A A G T T C T T C C G T A C C G T T   L15304.seq
490   C T G C C G C T T C T A T C G C A G C G T T A A G T T C T T C C G T A C C G T T   U72704.seq
650   C T G C █G C T T C T A T C G C A G C G T T █A G T T C T T C C G T A C █G T T   U00456.seq
```

FIG. 2 (continued)
Sheet 3 of 10

```
      . T A C T T T G G T T A C G C C A A A G G A C G A A C C T G A C C G T G C C G G C   Majority

                      490                 500                 510                 520

355   T A C T T T G G T T A C G C C A A A G G A C G A A C C T G A C C G T G C C G G C   U94526.seq
355   T A C T T T G G T T A C G C C A A A G G A C G A A C C T G A C C G T G C C G G C   U94527.seq
355   T A C T T T G G T T A C G C C A A A G G A C G A A C C T G A C C G T G C C G G C   U94528.seq
355   T A C T T T G G T T A C G C C A A A G G A C G A A C C T G A C C G T G C C G G C   U94529.seq
355   T A C T T T G G T T A C G C C A A A G G A C G A A C C T G A C C G T G C C G G C   U94530.seq
243   T A C T T T G G T T A C G C C A A A G G A C G A A C C T G A C C G T G C C G G C   L15304.seq
450   T A C T T T G G T T A [A] G C C A A A G G A C G A A C C T G A C C G T G C C G G C   U72704.seq
610   T A C T T T G G T T A C G C C A A A G G A C G A A C C T G A C C G T G C C G G C   U00456.seq


      T T C A C A A A G A C A G G G T A G G T A A G C G C A C C C G C C T C C G G C T   Majority

                      . 530               540                 550                 560

395   T T C A C A A A G A C A G G G T A G G T A A G C G C A C C C G C C T C C G G C T   U94526.seq
395   T T C A C A A A G A C A G G G T A G G T A A G C G [T C] C [T] C G C C T C C G G [G] T   U94527.seq
395   T T C A C A A A G A C A G G G T A G G T A A G C G C A C C C G C C T C C G G C T   U94528.seq
395   T T C A C A A A G A C A G G G T A G G T A A G C G C A C C C G C C T C C G G C T   U94529.seq
395   T T C A C A A A G A C A G G G T A G G T A A G C G C A C C C G C C T C C G G C T   U94530.seq
203   T T C A C A A A G A C A G G G T A G G T A A G C G C A C C C G C C T C C G G C T   L15304.seq
410   T T C A C A A A G A C A G G G T A G G T A A G C G C A C C C G [T] C T C C G G C T   U72704.seq
570   T T C A C A A A G A C A G G G T A G G T A A G C G [T] C [T] C G C C T C C G G [T] T   U00456.seq


      T G T C A C C T T T A T C A A T C A T T T G A A A T T C G G G A A C G G C G A T   Majority

                      570                 580                 590                 600

435   T G T C A C C T T T A T C A A T C A T T T G A A A T T C G G G A A C G G C G A T   U94526.seq
435   T G T C A C C T T T [T] T C A A T C A T T T G A A A T T C G G G [G] A C G G C G A T   U94527.seq
435   T G T C A C C T T T A T C A A T [A] A T T T G A A A T T C G G G A A C G G C G A T   U94528.seq
435   T G T C A C C T T T A T C A A T [A] A T T T G A A A T T C G G G A A C G G C G A T   U94529.seq
435   T G T C A C C T T T A T C A A T [A] A T T T G A A A T T C G G G A A C G G C G A T   U94530.seq
163   T G T C A C C T T T A T C A A T C A T T T G A A A T T C G G G A A C G G C G A T   L15304.seq
370   T G T C A C C T T T A T C A A T C A T T T G A A A T T C G G G A A C G G C G A T   U72704.seq
530   T G T C A C C T T T [T] T C A A T C A T T T G A A A T T C G G G [G] A C G G C G A T   U00456.seq


      G C C C G C A T T T T T T G T A A G A A T G T A G G C C A G T G A T T T G T C C   Majority

                      610                 620                 630                 640

475   G C C C G C A T T T T T T G T A A G A A T G T A G G C C A G T G A T T T G T C C   U94526.seq
475   G C C C G C A T T T T T T G T A A G A A T G T A G G C C A G T G A T T T G T C C   U94527.seq
475   G C C C G C A T T T T T T G T A A G A A T G T A G G C C A G T G A T T T G T C C   U94528.seq
475   G C C C G C A T T T T T T G T A A G A A T G T A G G C C A G T G A T T T G T C C   U94529.seq
475   G C C C G C A T T T T T T G T A A G A A T G T A G G C C A G T G A T T T G T C C   U94530.seq
123   G C C C G C A T T T T T T G T A A G A A T G T A G G C C A G T G A T T T G T C C   L15304.seq
330   G C C C G C A T T T T T T G T A A G A A T G T A G G C C A G T G A T T T G T C C   U72704.seq
490   G C C C G C A T T T T T T G T A A G A A T G T A G G C C A G T G A T T T G T C C   U00456.seq
```

FIG. 2 (cont'd)
Sheet 4 of 10

```
        A T G C A A G C T G C G G A G C T T T G A A T A T C A C A G C C C A C A T A G G  Majority

                    650                 660                 670                 680

515     A T G C A A G C T G C G G A G C T T T G A A T A T C A C A G C C C A C A T A G G  U94526.seq
515     A T G C A A G C T G C G G A G C T T T G A A T A T C ▓ C A G C C ▓ A C A T A G G  U94527.seq
515     A T G C A A G C T G C G G A G C T T T G A A T A T C A C A G C C C A C A T A G G  U94528.seq
515     A T G C A A G C T G C G G A G C T T T G A A T A T C A C A G C C C A C A T A G G  U94529.seq
515     A T G C A A G C T G C G G A G C T T T G A A T A T C A C A G C C C A C A T A G G  U94530.seq
83      A T G C A A G C T G C G G A G C T T T G A A T A T C A C A G C C C A C A T A G G  L15304.seq
290     A T G C A A G C T G C G G A G C T T T G A A T A T C ▓ C A G C C C A C A T A G G  U72704.seq
450     A T G C A A G C T G C G G A G C T T T G A A T A T C ▓ C A G C C ▓ A C A T A G G  U00456.seq


        G G A T A C C A G A C A A T T C A A A C A G C C C C T G T A T C G C A C C A T C  Majority

                    690                 700                 710                 720

555     G G A T A C C A G A C A A T ▓ C A A A C A G C C C C T G T A T C G C A C C A T C  U94526.seq
555     G G A T A C C A G A C A A T T C A A A C A G ▓ C C C T G T A T C G C A C C A T C  U94527.seq
555     G G A T A C C A G A C A A T ▓ C A A A C A G C C C C T G T A T C G C A C C A T C  U94528.seq
555     G G A T A C C A G A C A A T ▓ C A A A C A G C C C C T G T A T C G C A C C A T C  U94529.seq
555     G G A T A C C A G A C A A T ▓ C A A A C A G C C C C T G T A T C G C A C C A T C  U94530.seq
43      G G A T A C C A G A C A A T T C A A A C A G ▓ C C C T G ▓ A T ▓ G C A C C ▓▓▓▓  L15304.seq
250     G G A T ▓ C C A G A C A A T T C A A A ▓ A ▓ ▓ C C C T G T A T C G C A C C ▓ T C  U72704.seq
410     G G A T A C C A G A C A A T T C A A A C A G ▓ C C C T G T A T C G C A C C A T C  U00456.seq


        C T C C C C G C A T T T G C C A T G C A A A A C C G G G A A A G C C A C A T C A  Majority

                    730                 740                 750                 760

595     C T C C C C G C A T T T G C C A T G C A A A A C C G G G A A A G C C A C A T C A  U94526.seq
595     C T C C C C G C A T T T G C C A T G C A A A A C C G G G A A A G C C A C ▓ T C A  U94527.seq
595     C T C C C C G C A T T T G C C A T G C A A A A C C G G G A A A G C C A C A T C A  U94528.seq
595     C T C C C C G C A T T T G C C A T G C A A A A C C G G G A A A G C C A C A T C A  U94529.seq
595     C T C C C C G C A T T T G C C A T G C A A A A C C G G G A A A G C C A C A T C A  U94530.seq
7       ▓▓▓▓▓▓▓ C A T ▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓  L15304.seq
210     C T C C C C G C A T T T G C C A T G C A A A A C ▓ G G G A A A G C C A C A T C A  U72704.seq
370     C T C C C C G C A T T T G C C A T G C A A A A C C G G G A A A G C C A C ▓ T C A  U00456.seq


        A T A C G C C G T G T T T C G T A T T C G C T T T C T T T C A T G A C A A G C A  Majority

                    770                 780                 790                 800

635     A T A C G C C G T G T T T C G T A T T C G C T T T C T T T C A T G A C A A G C A  U94526.seq
635     A T A C G C C G ▓ G T T T C G T A T T C ▓ C T T T C T T T C A T G A C A A G C A  U94527.seq
635     A T A C G C C G T G T T T C G T A T T C G C T T T C T T T C A T G A C A A G C A  U94528.seq
635     A T A C G C C G T G T T T C G T A T T C G C T T T C T T T C A T G A C A A G C A  U94529.seq
635     A T A C G C C G T G T T T C G T A T T C G C T T T C T T T C A T G A C A A G C A  U94530.seq
4       ▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓  L15304.seq
170     A T A C G C C G T G T T T C G T A T T C G C T T T C T T T C A T G A C A A G C A  U72704.seq
330     A T A C G C C G ▓ G T T T C G T A T T C ▓ C T T T C T T T C A T G A C A A G C A  U00456.seq
```

FIG. 2. (cont'd)
Sheet 5 of 10

```
            ·G C C C A T G C G T T T T C C T A T C C G G G G A G A G T A T G G C G G G G A G  Majority

                           810                 820                 830                 840
      675   G C C C A T G C G T T T T C C T A T C C G G G G A G A G T A T G G C G G G G A G  U94526.seq
      675   G █ C C A T G C G T T T T C C T A T C C G G G G A G A █ T A T G G C G G G G A G  U94527.seq
      675   G C C C A T G C G T T T T C C T A T C C G G G G A G A G T A T G G C G G G G A G  U94528.seq
      675   G C C C A T G C G T T T T C C T A T C C G G G G A G A G T A T G G C G G G G A G  U94529.seq
      675   G C C C A T G C G T T T T C C T A T C C G G G G A G A G T A T G G C G G G G A G  U94530.seq
        4   ████████████████████████████████████████████████████████████████████████████  L15304.seq
      130   G █ C C A T G C G T T T T C C T A T C C G G G G A G A G T A T G G C G G G G A G  U72704.seq
      290   G █ C C A T G C G T T T T C C T A T C C G G G G A G A █ T A T G G C G G G G A G  U00456.seq

            A C T G T C G G C T T C C C A T T C C G T A C A T G G C T T C T T G C A T A G C  Majority

                           850                 860                 870                 880
      715   A C T G T C G G C T T C C C A T T C C G T A C A T G G C T T C T T G C A T A G C  U94526.seq
      715   A C T █ T C G G C T T C C C A T T C C G T A C A T G G C T T C T T G C A T A G C  U94527.seq
      715   A C T G T C G G C T T C C C A T T C C G T A C A T G G C T T C T T G C A T A G C  U94528.seq
      715   A C T G T C G G C T T C C C A T T C C G T A C A T G G C T T C T T G C A T A G C  U94529.seq
      715   A C T G T C G G C T T C C C A T T C C G T A C A T G G C T T C T T G C A T A G C  U94530.seq
        4   ████████████████████████████████████████████████████████████████████████████  L15304.seq
       90   A C T G T C G G C T T C C C A T T C C G T A C A T G G C T T C T T G C A T A G C  U72704.seq
      250   A C T █ T C G G C T T C C C A T T C C G T A C A T G G C T T C T T G C A T A G C  U00456.seq

            T T C C A T A C A C C G T T T T T T G T A A T T C C G A T G T A G T G C G G A T  Majority

                           890                 900                 910                 920
      755   T T C C A T A C A C C G T T T T T T G T A A T T C C G A T G T A G T G C G G A T  U94526.seq
      755   T T C C A T A C █ C C G T T T T T T G T A A T T C C G A T G T A G T G C G G A T  U94527.seq
      755   T T C C A T A C A C C G T T T T T T G T A A T T C C G A T G T A G T G C G G A T  U94528.seq
      755   T T C C A T A C A C C G T T T T T T G T A A T T C C G A T G T A G T G C G G A T  U94529.seq
      755   T T C C A T A C A C C G T T T T T T G T A A T T C C G A T G T A G T G C G G A T  U94530.seq
        4   ████████████████████████████████████████████████████████████████████████████  L15304.seq
       50   T T C C A T A C A C C █ █ T T T T T T G T A A T T C C G A T G T A G T G C G G A T  U72704.seq
      210   T T C C A T A C █ C C G T T T T T T G T A A T T C C G A T G T A G T G C G G A T  U00456.seq

            C G A A T T T X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X  Majority

                           930                 940                 950                 960
      795   C G A A T T T                                                                    U94526.seq
      795   C G A A T T T                                                                    U94527.seq
      795   C G A A T T T                                                                    U94528.seq
      795   C G A A T T T                                                                    U94529.seq
      795   C G A A T T T                                                                    U94530.seq
        4   ████████████████████████████████████████████████████████████████████████████  L15304.seq
       10   C G A A T T T                                                                    U72704.seq
      170   C G A A T T T ████████████████████████████████████████████████████████████████  U00456.seq
```

FIG. 2 (cnt'd)
Sheet 6 of 10

```
·X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X  Majority
          970              980              990              1000
801 ─────────────────────────────────────────────────────────────────  U94526.seq
801 ─────────────────────────────────────────────────────────────────  U94527.seq
801 ─────────────────────────────────────────────────────────────────  U94528.seq
801 ─────────────────────────────────────────────────────────────────  U94529.seq
801                                                                      U94530.seq
4   [shaded sequence]                                                    L15304.seq
1                                                                        U72704.seq
130 [shaded sequence]                                                    U00456.seq

X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X  Majority
          1010             1020             1030             1040
801 ─────────────────────────────────────────────────────────────────  U94526.seq
801 ─────────────────────────────────────────────────────────────────  U94527.seq
801 ─────────────────────────────────────────────────────────────────  U94528.seq
801 ─────────────────────────────────────────────────────────────────  U94529.seq
801 ─────────────────────────────────────────────────────────────────  U94530.seq
1                                                                        L15304.seq
1                                                                        U72704.seq
90  [shaded sequence]                                                    U00456.seq

X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X  Majority
          1050             1060             1070             1080
801 ─────────────────────────────────────────────────────────────────  U94526.seq
801 ─────────────────────────────────────────────────────────────────  U94527.seq
801 ─────────────────────────────────────────────────────────────────  U94528.seq
801 ─────────────────────────────────────────────────────────────────  U94529.seq
801 ─────────────────────────────────────────────────────────────────  U94530.seq
1                                                                        L15304.seq
1                                                                        U72704.seq
50  [shaded sequence]                                                    U00456.seq

X X X X X X X X X X  Majority
          1090
801                  U94526.seq
801                  U94527.seq
801                  U94528.seq
801                  U94529.seq
801                  U94530.seq
1                    L15304.seq
1                    U72704.seq
10  [shaded sequence] U00456.seq
```

Decoration 'Decoration #1': Shade (with black at 40% fill) residues that differ from the Consensus.

FIG. 2 (cont'd)
Sheet 7 of 10

```
  1 aacgatgccg ccatcctcct gcaaaaaaag atcaacacgg gcaagccctc tgcatccaag
 61 cacccgatat actttctttg ccgtttcctg cacccgattt cgttcctcga ccggaatgtc
121 tgcgggaact gtaatcatcg cattttctga gccttttttcc ggctcgtttt cctgatggat
181 gcggaagata ccgtggctca gccggatttg atccacttcg ccgacaatca aatcatcctc
241 gttccccatg accgcacacc cgacctcaca gcccgaaatc gcttgctcaa ttaagatttt
301 tccatcatat tgtcctgccg cttctatcgc agcgttaagt tcttccgtac cgtttacttt
361 ggttacgcca aaggacgaac ctgaccgtgc cggcttcaca aagacagggt aggtaagcgc
421 acccgcctcc ggcttgtcac ctttatcaat catttgaaat tcgggaacgg cgatgcccgc
481 atttttttgta agaatgtagg ccagtgattt gtccatgcaa gctgcggagc tttgaatatc
541 acagcccaca taggggatac cagacaatac aaacagcccc tgtatcgcac catcctcccc
601 gcatttgcca tgcaaaaccg ggaaagccac atcaatacgc cgtgtttcgt attcgctttc
661 tttcatgaca agcagcccat gcgttttcct atccggggag agtatggcgg ggagactgtc
721 ggcttcccat tccgtacatg gcttcttgca tagcttccat acaccgtttt ttgtaattcc
781 gatgtagtgc ggatcgaatt t
```

SEQ ID NO: 10

```
  1 aacgatgccg ccatcctcct gcaaaaaaag atcaacacga gcaagccctc tgcatccaag
 61 cacccgatat actttctttg ccgtttcttg cacccgattt cgttcctcga ccggaatgtc
121 tgctggaacg ataatcatcg cattctctga gccttttttcc ggctcgtttt cctgatggat
181 gcggaagata ccgtggctca accggatttg atccacttcg ccgacaatca aatcatcctc
241 gttccccatg accgcgcagc cgacctcaca gcccgaaatc gcttgctcaa ttaagatttt
301 tccatcatat tgtcctgctg cttctatcgc agcgtttagt tcttccgtac tgtttacttt
361 ggttacgcca aaggacgaac ctgaccgtgc cggcttcaca aagacagggt aggtaagcgt
421 cctcgcctcc ggtttgtcac ctttttcaat catttgaaat tcggggacgg cgatgcccgc
481 atttttttgta agaatgtagg ccagtgattt gtccatgcaa gctgcggagc tttgaatatc
541 gcagcctaca taggggatac cagacaattc aaacagaccc tgtatcgcac catcctcccc
601 gcatttgcca tgcaaaaccg ggaaagccac gtcaatacgc cgagtttcgt attctctttc
661 tttcatgaca agcagaccat gcgttttcct atccggggag aatatggcgg ggagactatc
721 ggcttcccat tccgtacatg gcttcttgca tagcttccat acgccgtttt ttgtaattcc
781 gatgtagtgc ggatcgaatt t
```

SEQ ID NO: 11

```
  1 aacgatgccg ccatcctcct gcaaaaaaag atcaacacgg gcaagccctc tgcatccaag
 61 cacccgatat actttctttg ccgtttcctg cacccgattt cgttcctcga ccggaatgtc
121 tgcgggaact gtaatcatcg cattttctga gccttttttcc ggctcgtttt cctgatggat
181 gcggaagata ccgtggctca gccggatttg atccacttcg ccgacaatca aatcatcctc
241 gttccccatg accgcacacc cgacctcaca gcccgaaatc gcttgctcaa ttaagatttt
301 tccatcatat tgtcctgccg cttctatcgc agcgttaagt tcttccgtac cgtttacttt
361 ggttacgcca aaggacgaac ctgaccgtgc cggcttcaca aagacagggt aggtaagcgc
421 acccgcctcc ggcttgtcac ctttatcaat aatttgaaat tcgggaacgg cgatgcccgc
481 atttttttgta agaatgtagg ccagtgattt gtccatgcaa gctgcggagc tttgaatatc
541 acagcccaca taggggatac cagacaatac aaacagcccc tgtatcgcac catcctcccc
601 gcatttgcca tgcaaaaccg ggaaagccac atcaatacgc cgtgtttcgt attcgctttc
661 tttcatgaca agcagcccat gcgttttcct atccggggag agtatggcgg ggagactgtc
721 ggcttcccat tccgtacatg gcttcttgca tagcttccat acaccgtttt ttgtaattcc
781 gatgtagtgc ggatcgaatt t
```

SEQ ID NO: 12

FIG. 2 (cont'd)
Sheet 8 of 10

```
  1 aacgatgccg ccatcctcct gcaaaaaaag atcaacacgg gcaagccctc tgcatccaag
 61 cacccgatat actttctttg ccgtttcctg cacccgattt cgttcctcga ccggaatgtc
121 tgcgggaact gtaatcatcg cattttctga gccttttttcc ggctcgtttt cctgatggat
181 gcggaagata ccgtggctca gccggatttg atccacttcg ccgacaatca aatcatcctc
241 gttccccatg accgcacacc cgacctcaca gcccgaaatc gcttgctcaa ttaagatttt
301 tccatcatat tgtcctgccg cttctatcgc agcgttaagt tcttccgtac cgtttacttt
361 ggttacgcca aaggacgaac ctgaccgtgc cggcttcaca aagacagggt aggtaagcgc
421 acccgcctcc ggcttgtcac ctttatcaat aatttgaaat tcgggaacgg cgatgcccgc
481 attttttgta agaatgtagg ccagtgattt gtccatgcaa gctgcggagc tttgaatatc
541 acagcccaca taggggatac cagacaatac aaacagcccc tgtatcgcac catcctcccc
601 gcatttgcca tgcaaaaccg ggaaagccac atcaatacgc cgtgtttcgt attcgctttc
661 tttcatgaca agcagcccat gcgttttcct atccggggag agtatggcgg ggagactgtc
721 ggcttcccat tccgtacatg gcttcttgca tagcttccat acaccgtttt ttgtaattcc
781 gatgtagtgc ggatcgaatt t
```

SEQ ID NO:13

```
  1 aacgatgccg ccatcctcct gcaaaaaaag atcaacacgg gcaagccctc tgcatccaag
 61 cacccgatat actttctttg ccgtttcctg cacccgattt cgttcctcga ccggaatgtc
121 tgcgggaact gtaatcatcg cattttctga gccttttttcc ggctcgtttt cctgatggat
181 gcggaagata ccgtggctca gccggatttg atccacttcg ccgacaatca aatcatcctc
241 gttccccatg accgcacacc cgacctcaca gcccgaaatc gcttgctcaa ttaagatttt
301 tccatcatat tgtcctgccg cttctatcgc agcgttaagt tcttccgtac cgtttacttt
361 ggttacgcca aaggacgaac ctgaccgtgc cggcttcaca aagacagggt aggtaagcgc
421 acccgcctcc ggcttgtcac ctttatcaat aatttgaaat tcgggaacgg cgatgcccgc
481 attttttgta agaatgtagg ccagtgattt gtccatgcaa gctgcggagc tttgaatatc
541 acagcccaca taggggatac cagacaatac aaacagcccc tgtatcgcac catcctcccc
601 gcatttgcca tgcaaaaccg ggaaagccac atcaatacgc cgtgtttcgt attcgctttc
661 tttcatgaca agcagcccat gcgttttcct atccggggag agtatggcgg ggagactgtc
721 ggcttcccat tccgtacatg gcttcttgca tagcttccat acaccgtttt ttgtaattcc
781 gatgtagtgc ggatcgaatt t
```

SEQ ID NO:14

```
  1 gaggatgggt gcatccaggg actgtttgaa ttgtctggta tcccctatgt gggctgtgat
 61 attcaaagct ccgcagcttg catggacaaa tcactggcct acattcttac aaaaaatgcg
121 ggcatcgccg ttcccgaatt tcaaatgatt gataaaggtg acaagccgga ggcgggtgcg
181 cttacctacc ctgtctttgt gaagccggca cggtcaggtt cgtcctttgg cgtaaccaaa
241 gtaaacggta cggaagaact taacgctgcg atagaagcgg caggacaata tgatggaaaa
301 atcttaattg agcaagcgat ttcgggctgt gaggtcgggt gtgcggtcat ggggaacgag
361 gatgatttga ttgtcggcga agtggatcaa atccggctga gccacggtat cttccgcatc
421 catcaggaaa acgagccgga aaaaggctca gaaaatgcga tgattacagt tcccgcagac
481 attccggtcg aggaacgaaa tcgggtgcag gaaacggcaa agaaagtata tcgggtgctt
541 ggatgcagag ggcttgcccg tgttgatctt tttttgcagg aggatggcgg catcgttcta
601 aatgaggtca acaccctgcc cggcttcacg
```

SEQ ID NO:15

FIG. 2 (cont'd)
Sheet 9 of 10

```
  1 gaaaaattcg atccgcacta catcggaatt acaaaaaggg gtgtatggaa gctatgcaag
 61 aagccatgta cggaatggga agccgacagt ctccccgcca tactctcccc ggataggaaa
121 acgcatggtc tgcttgtcat gaaagaaagc gaatacgaaa cacggcgtat tgatgtggct
181 ttcccagttt tgcatggcaa atgcgggggag gacggtgcga tacagggttt atttgaattg
241 tctggcatcc cctatgtggg ctgcgatatt caaagctccg cagcttgcat ggacaaatca
301 ctggcctaca ttcttacaaa aaatgcgggc atcgccgttc ccgaatttca aatgattgat
361 aaaggtgaca agccggagac gggtgcgctt acctaccctg tctttgtgaa gccggcacgg
421 tcaggttcgt cctttggctt aaccaaagta aacggtacgg aagaacttaa cgctgcgata
481 gaagcggcag gacaatatga tggaaaaatc ttaattgagc aagcgatttc gggctgtgag
541 gtcggctgtg cggttatggg gaacgaggat gatttgattg tcggcgaagt ggatcaaatc
601 cggctgagcc atggtatctt ccgcatccat caggaaaacg agccggaaaa aggatcagag
661 aatgcgatga ttaccgttcc tgcagacatc ccagtcgggg aacgaaatcg ggtgcaggaa
721 acggcaaaga aagtatatcg ggcgcttgga tgcagagggc ttgcccgtgt tgatctttt
781 ttg
```

```
   1 tgctgcgaga taccacagaa aacaatcagg aattgtctta actttgaaag gagtttacag
  61 catgaataaa ataaaagtcg caattatctt cggcggttgc tcggaggaac atgatgtgtc
 121 ggtaaaatcc gcaatagaaa ttgctgcgaa cattaatact gaaaaaattcg atccgcacta
 181 catcggaatt acaaaaaacg gcgtatggaa gctatgcaag aagccatgta cggaatggga
 241 agccgatagt ctccccgcca tattctcccc ggataggaaa acgcatggtc tgcttgtcat
 301 gaaagaaaga gaatacgaaa ctcggcgtat tgacgtggct ttcccggttt tgcatggcaa
 361 atgcggggag gatggtgcga tacagggtct gtttgaattg tctggtatcc cctatgtagg
 421 ctgcgatatt caaagctccg cagcttgcat ggacaaatca ctggcctaca ttcttacaaa
 481 aaatgcgggc atcgccgtcc ccgaatttca aatgattgaa aaaggtgaca aaccggaggc
 541 gaggacgctt acctaccctg tctttgtgaa gccggcacgg tcaggttcgt cctttggcgt
 601 aaccaaagta aacagtacgg aagaactaaa cgctgcgata gaagcagcag gacaatatga
 661 tggaaaaatc ttaattgagc aagcgatttc gggctgtgag gtcggctgcg cggtcatggg
 721 aaacgaggat gatttgattg tcggcgaagt ggatcaaatc cggttgagcc acggtatctt
 781 ccgcatccat caggaaaacg agccggaaaa aggctcagag aatgcgatga ttatcgttcc
 841 agcagacatt ccggtcgagg aacgaaatcg ggtgcaagaa acggcaaaga aagtatatcg
 901 ggtgcttgga tgcagagggc ttgctcgtgt tgatcttttt ttgcaggagg atggcggcat
 961 cgttctaaac gaggtcaata ccctgcccgg ttttacatcg tacagccgct atccacgcat
1021 ggcggctgcc gcaggaatca cgcttcccgc actaattgac agcctgatta cattggcgat
1081 agagaggtga
```

FIG. 2 (cont'd)
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Escherichia coli
Klebsiella pneumoniae
Serratia marcescens
Citrobacter freundii
Proteus mirabolis
Salmonella enteritidids
Pseudomonas aeroginosa
Haemophilus influenzae
Haemophilus parainfluenzae
Candida glabrata
Candida albicans
Candida krusei
Candida parapsolosis
Bacillus cereus
Listeria monocytogenes
Corynebacterium urealyticum
Archanobacterium haemolyticum
Erysipilothrix rhusopathiae
Stomatococcus
Micrococcus luteus
Staphylococcus saphrophyticus
Staphylococcus aureus
Staphylococcus epidermidis
Group A Streptococcus
Streptococcus mitis
Streptococcus pneumoniae
Group B Streptococcus
VanA Enterococcus faecium
VanB Enterococcus faecium
Non VanA/VanB Enterococcus faecium

Fig 3